Please check the examination details bel	ow before ente	ering your candidate information
Candidate surname		Other names
Centre Number Candidate N	umber	
Pearson Edexcel Leve	l 1/Lev	el 2 GCSE (9–1)
Monday 22 May 202	23	
Afternoon (Time: 1 hour 30 minutes)	Paper reference	1GA0/01
Geography A PAPER 1: The Physical En	vironme	ent
You must have:		Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- In Section A answer Question 1 and **two** questions from Questions 2, 3 and 4.
- In Section B and Section C answer all questions.
- Answer the questions in the spaces provided
 there may be more space than you need.
- Where asked you must show all your working out with your answer clearly identified at the end of your solution.

Information

- The total mark for this paper is 94.
- The marks for **each** question are shown in brackets
 - use this as a guide as to how much time to spend on each question.
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶





SECTION A

The Changing Landscapes of the UK

Answer ALL parts of Question 1. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box \boxtimes . If you change your mind about an answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .

1	ine ui	k's ian	asca	ipe is made up of different rock types.	
	(a) (i)	Ident	tify \	which one of the following is an igneous rock.	(1)
		×	A	basalt	
		X	В	chalk	
		X	C	sandstone	
		X	D	slate	
	(ii)	State	on	e characteristic of igneous rocks.	(1)
	(b) Stu	ıdy Fig	gure	1 in the Resource Booklet.	
	(i)	Ident	tify t	the type of woodland in grid square 7084.	(1)
	(ii)	Nam	e th	e settlement at 723828.	(1)
	(c) Exp	plain c	one	way that geology has affected the development of UK landscapes.	(2)
•••••			••••••		
			••••••		
		•••••			
				(Total for Question 1 = 6 m	arks)



Answer only TWO questions from Question 2 (Coastal Landscapes and Processes), Question 3 (River Landscapes and Processes) and Question 4 (Glaciated Upland Landscapes and Processes).

		Question + (Glaciated Opiana Editascapes and 1 10ccsses).	
		Question 2: Coastal Landscapes and Processes If you answer Question 2, put a cross in the box $\ oxdot$.	
2	Coastal land	scapes are constantly being changed by different processes.	
	(a) Name or	e type of mass movement.	(1)
		jure 2a in the Resource Booklet. he year with the greatest amount of coastal erosion.	
	identity t	The year with the greatest amount of coastal crosion.	(1)
		2012	
	⊠ B	2015	
		2017	
	⊠ D	2020	
	(c) Explain o	ne reason why rates of coastal erosion may change over time.	(2)
			(2)



(d)	Study Figures 2b and 2c in the Resource Booklet.	
	Examine the role of physical processes in the formation of the spit shown in Figures 2b and 2c.	
	You must use evidence from Figures 2b and 2c in your answer.	
	, ,	(8)
•••••		
•••••		



(Total for Question 2 = 12 marks)	(Total for Question 2 = 12 marks)

	If you answer Question 3, put a cross in the box $\ oxinverigsquare$.						
3	River lan	dsca	pes are constantly being changed by different processes.				
	(a) Nam	e on	e type of erosion.	(1)			
	(b) Stud	y Fig	ure 3a in the Resource Booklet.				
	Iden	tify tl	ne peak discharge shown on Figure 3a.	(1)			
	×	Α	200 m ³ /s				
	X	В	320 m ³ /s				
	X	C	420 m ³ /s				
	X	D	530 m ³ /s				
	•		ne reason why there is a lag time between peak rainfall and peak following a storm.	(2)			

(d)	Study Figures 3b and 3c in the Resource Booklet.	
	Examine the possible advantages and disadvantages of the reservoir and dam shown in Figures 3b and 3c.	
	You must use evidence from Figures 3b and 3c in your answer.	(8)



	(Total for Question 3 = 12 marks)
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	Question 4: Glaciated Upland Landscapes and Processes	
	If you answer Question 4, put a cross in the box $ igtiis $.	
4	A variety of processes interact to shape glaciated upland landscapes.	
	(a) Name one type of weathering.	(1)
		(1)
	(b) Study Figure 4a in the Resource Booklet.	
	Identify the grid square in which Red Tarn is located.	(4)
		(1)
	☑ B 3415	
	(c) Explain how arêtes are formed.	
		(2)



(d)	Study Figures 4b and 4c in the Resource Booklet.	
	Examine the possible advantages and disadvantages of the development of the ski resort shown in Figures 4b and 4c.	
	You must use evidence from Figures 4b and 4c in your answer.	
		(8)



(Total for Question 4 = 12 marks)

TOTAL FOR SECTION A = 30 MARKS

SECTION B

Weather Hazards and Climate Change

Answer ALL questions in this section. Write your answers in the spaces provided.

	-		must be answered with a cross in a box $oxtimes$. If you change your a line through the box $oxtimes$ and then mark your new answer with	
5	The causes	of dr	ought are complex.	
	(a) Define t	he te	erm drought .	(1)
	•		5a in the Resource Booklet. The amount of winter rainfall in 1995.	(1)
	\boxtimes	A	155 mm	
	\boxtimes	В	220 mm	
	\times	C	325 mm	
	×	D	400 mm	
	(ii) Calc	ulate	the range of winter rainfall.	
	You	mus	t show your working in the space below.	(2)

.....mm



(c) Explain one reason why some locations are more vuothers.	why some locations are more vulnerable to drought than				
others.	(3)				
	(Total for Ouestion 5 = 7 marks)				

6	The global climate was different in the past.								
	(a)	State one cause of natural climate change.	(1)						
	(b)	Explain one way in which tree rings can provide evidence of natural climate change.	(2)						
	(c)	Study Figure 6a in the Resource Booklet. Explain one reason for the changes in global temperatures shown on Figure 6a. You must use evidence from Figure 6a in your answer.							
			(3)						





(d)	Tropical cyclones are extreme weather events.	
	Study Figure 6b in the Resource Booklet.	
	Calculate the mean number of deaths per tropical cyclone shown on Figure 6b.	
	You must show your working in the space below.	
		(2)
	Mean number of death	_
	Mean number of death	3
(0)	Cyplain and vaccon why come two pical avalones load to make deaths they others	
(e)	Explain one reason why some tropical cyclones lead to more deaths than others.	(4)
(e)	Explain one reason why some tropical cyclones lead to more deaths than others.	(4)
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	Explain one reason why some tropical cyclones lead to more deaths than others.	



- (f) Study Figure 6c in the Resource Booklet.
 - (i) Identify the ocean surface temperature range at **X**.

(1)

- B 5-10°C

- (ii) Suggest **one** reason for the link between ocean surface temperature and the location of tropical cyclones.

You must use evidence from Figure 6c in your answer.

(2)

'Responses to tropical cyclones are mo emerging or developing countries.'	ore successful in developed countries than in
	(8)



(
l	(Total for Question 6 = 23 marks)

TOTAL FOR SECTION B = 30 MARKS

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SECTION C

Ecosystems, Biodiversity and Management

Answer ALL questions in this section. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box \boxtimes . If you change your mind about an answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .

Spelling, punctuation, grammar and specialist terminology will be assessed in Question 7(h).

- 7 Large-scale ecosystems are found in different parts of the world.
 - (a) Study Figure 7a below.

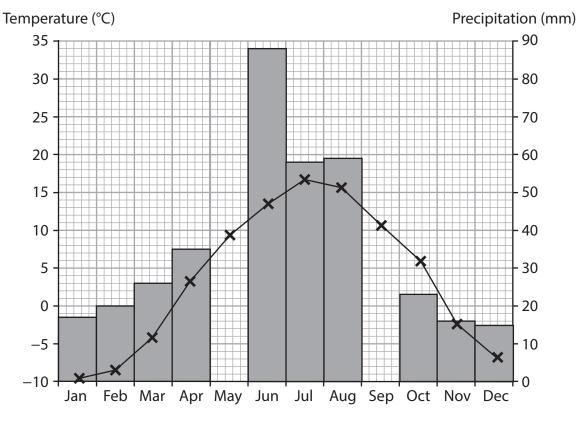




Figure 7a

Climate graph showing mean monthly data for an area of boreal forest in Alberta, Canada

(i) Plot the precipitation data for May and September to complete Figure 7a.

(2)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature (°C)	-9.9	-8.8	-4.4	3.6	9.8	13	16.7	15.1	10.9	5.4	-2.2	-6.6
Precipitation (mm)	17	20	26	35	52	88	58	59	34	23	16	15

(ii) Calculate the median precipitation using the data table above.

You must show your working in the space below.

(2)

..... mm

Explain one way climate can influence the distribution of large-scale ecosys	(3)

(c) Tropical rainforests have a range of distinguishing features.

Study Figure 7b in the Resource Booklet.

(i) Identify which animals are eaten by bats.

(1)

- **B** millipedes
- C mice
- **D** spiders
- (ii) Identify which animals eat worms.

(1)

- A butterflies
- B frogs
- C tenrecs
- **D** spiders

(d) Study Figure 7c below.

In 1900 Indonesia had an estimated tropical rainforest cover of 170 million hectares. By 2000, deforestation had reduced this forest cover to 100 million hectares.

Reasons for this deforestation included:

- Rising demand for goods such as medicines and timber
- · Uncertainty about who owns the land
- Political corruption
- Population growth
- Conflicts between local communities and large companies
- Mining for gold
- Oil palm plantations

Figure 7c

Information about deforestation in Indonesia

(i) Calculate the percentage decrease in the estimated forest cover in Indonesia between 1900 and 2000.

Answer to **one** decimal place.

You must show your working in the space below.

(2)

. %



	(ii)	Explain two economic reasons for the deforestation of tropical rainforest in Indonesia.	
		You must use evidence from Figure 7c in your answer.	(4)
1			
2			
(e) De	ciduous woodlands are common in temperate areas.	
	Sta	te one example of a service provided by deciduous woodland ecosystems.	(1)

(f) Explain one way in which animals adapt to the environment in deciduous woodlands.	nvironment in deciduous	
	(2)	
(g) Explain one approach to the sustainable management of deciduous woodlar	nds.	
(g) Explain ene approach to the sustainable management of accidable modular	(4)	

In this question, four of the marks awarded will be for your spelling, punctuation, grammar and for your use of specialist terminology.	
(h) Assess the view that climate is the most important reason why tropical rainforests have higher biodiversity than deciduous woodlands.	(8)

(2	Spelling, _l	ounctuatio	on, gramr	nar and	use of s	pecialist	terminol	ogy = 4 m n 7 = 34 m	arks)

TOTAL FOR SECTION C = 34 MARKS TOTAL FOR PAPER = 94 MARKS

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Pearson Edexcel Level 1/Level 2 GCSE (9-1)

Monday 22 May 2023

Afternoon (Time: 1 hour 30 minutes)

Paper reference

1GA0/01

Geography A

PAPER 1: The Physical Environment

Resource Booklet

Do not return this Booklet with the question paper.

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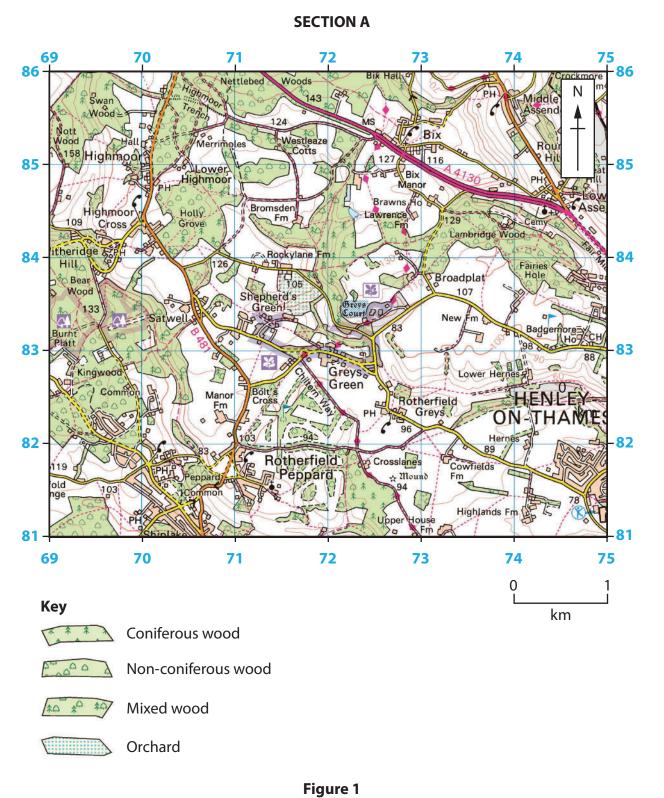


Figure 1

A lowland landscape in Oxfordshire, England

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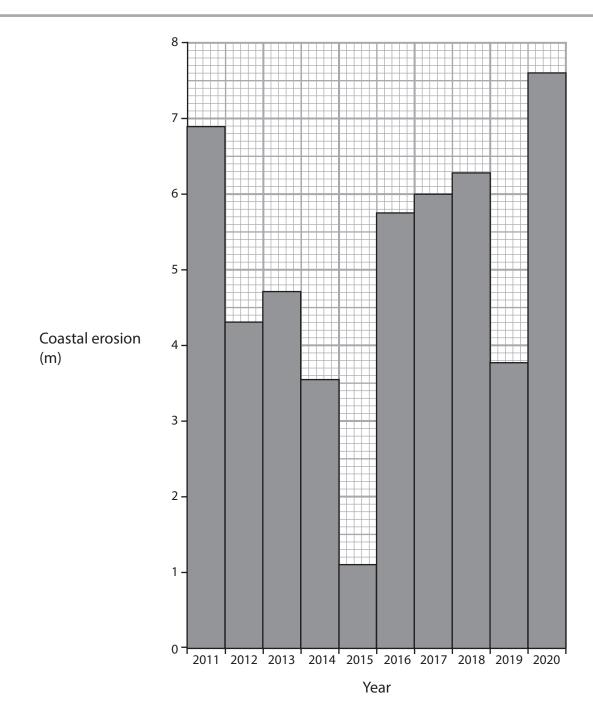


Figure 2a

Annual amount of coastal erosion at Withernsea, England

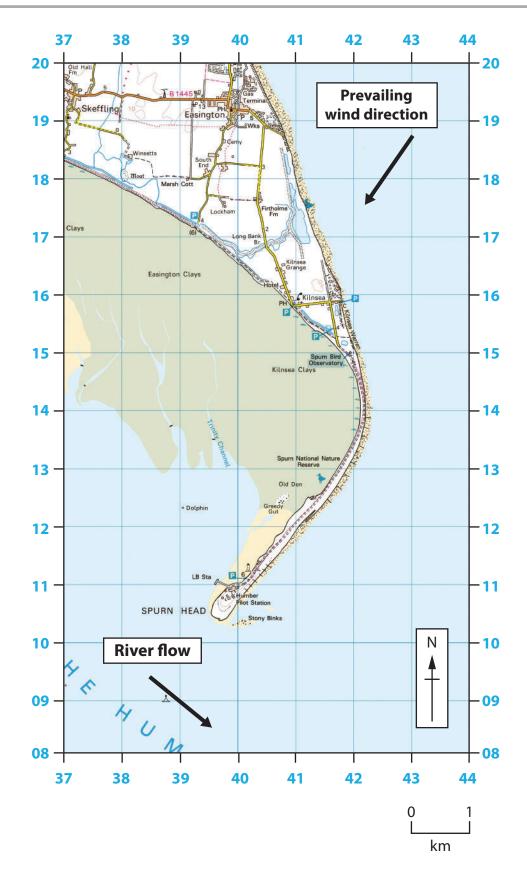
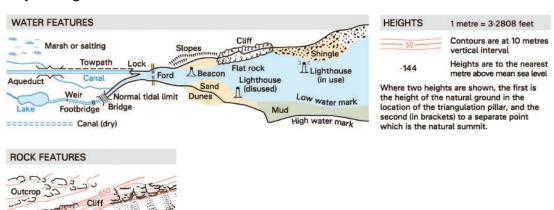


Figure 2b

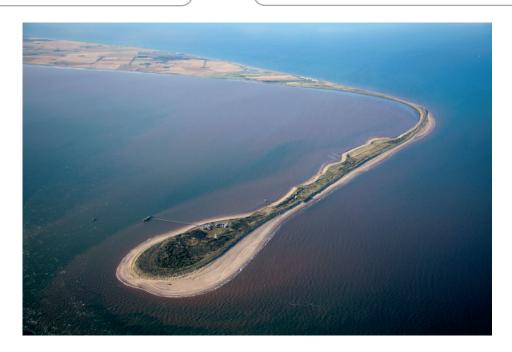
A spit in East Yorkshire, England

Key for Figure 2b



Spurn Head is a spit located in the North Sea.

It has been formed by physical processes such as longshore drift.



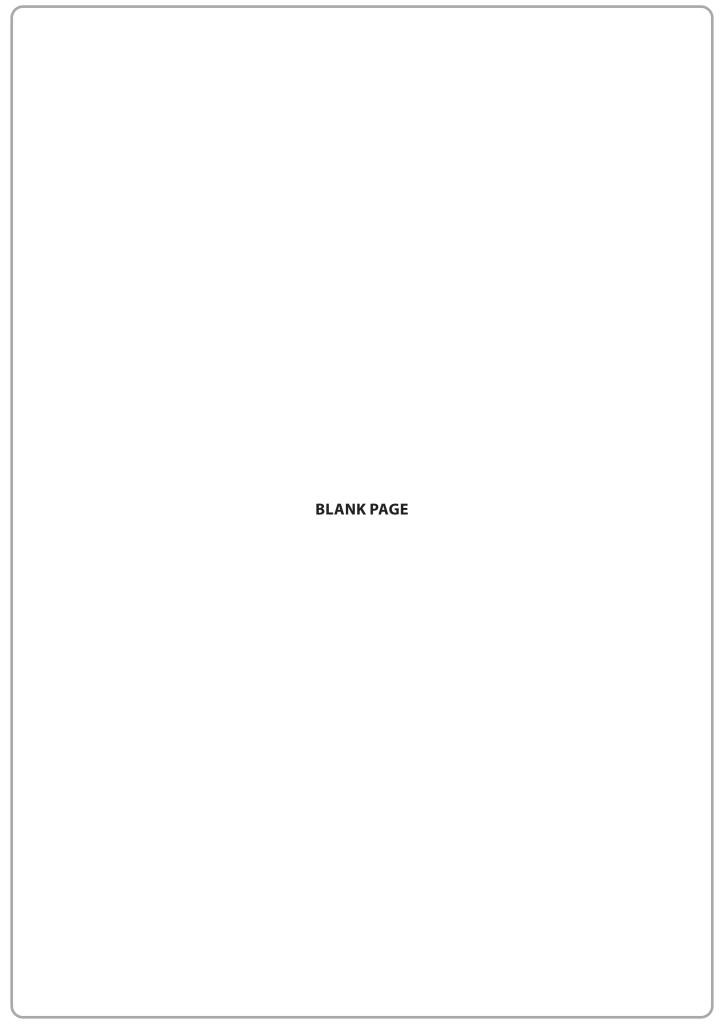
A saltmarsh has developed behind the spit.

In the past groynes have been used to maintain the position of the spit.

Figure 2c

An aerial photograph of a spit in East Yorkshire, England

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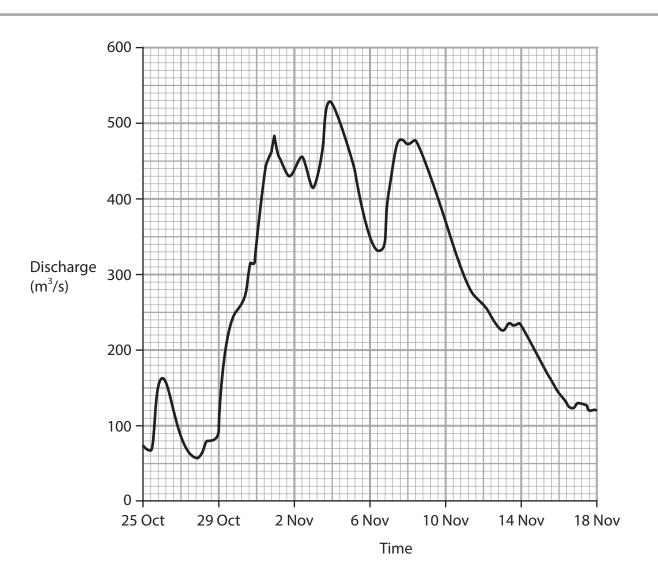


Figure 3a

Discharge for the River Ouse, England

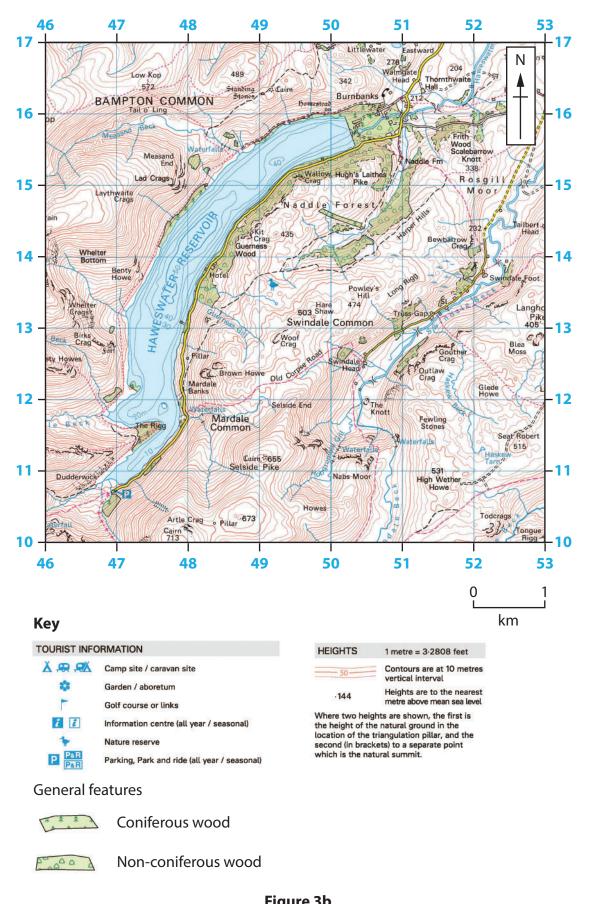


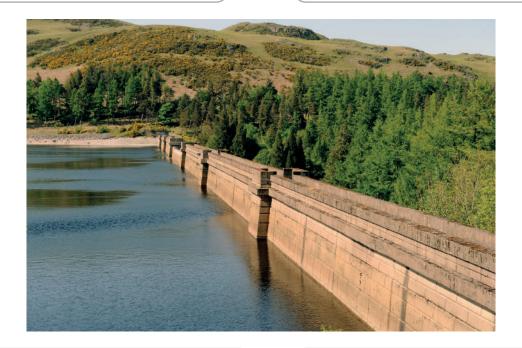
Figure 3b

Haweswater reservoir in the Lake District, England

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There was a natural lake that was made larger by the dam.

The dam, which was completed in 1935, is 27.5m high.

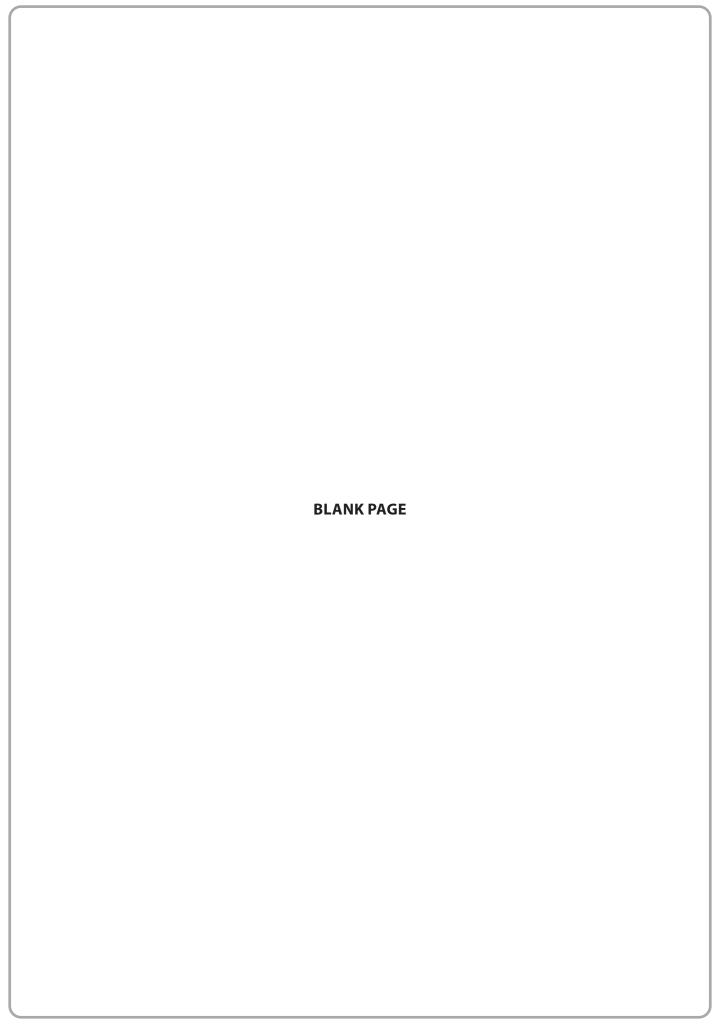


The village of Mardale Green was flooded as the reservoir filled.

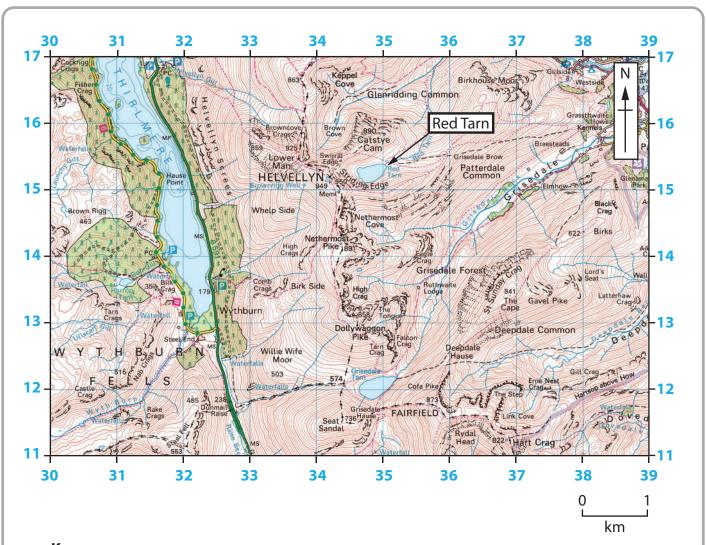
A stream flows out from the base of the dam.

Figure 3c

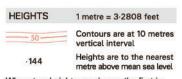
Haweswater dam in the Lake District, England







Key

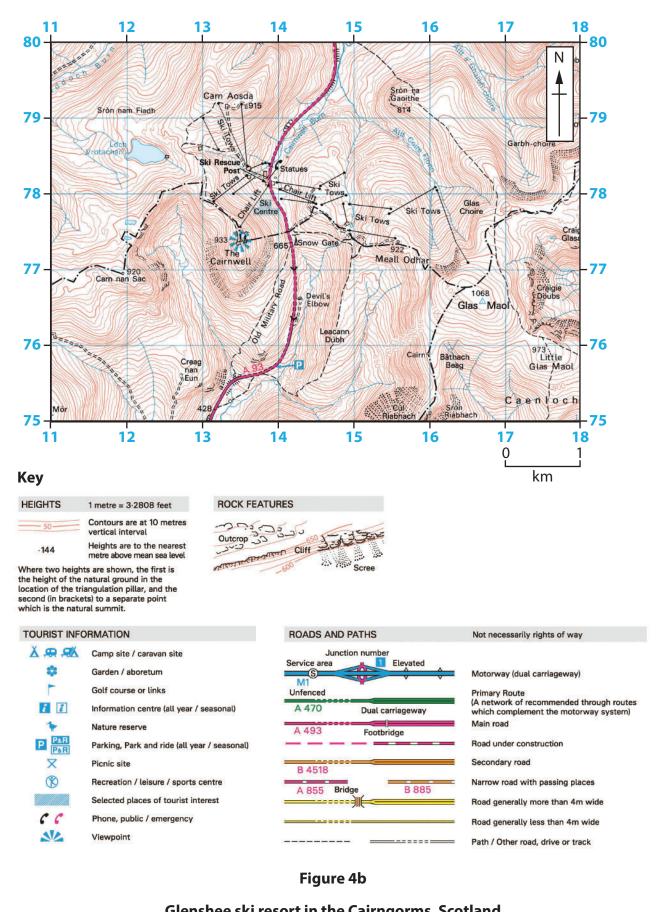


Where two heights are shown, the first is the height of the natural ground in the location of the triangulation pillar, and the second (in brackets) to a separate point which is the natural summit.



Figure 4a

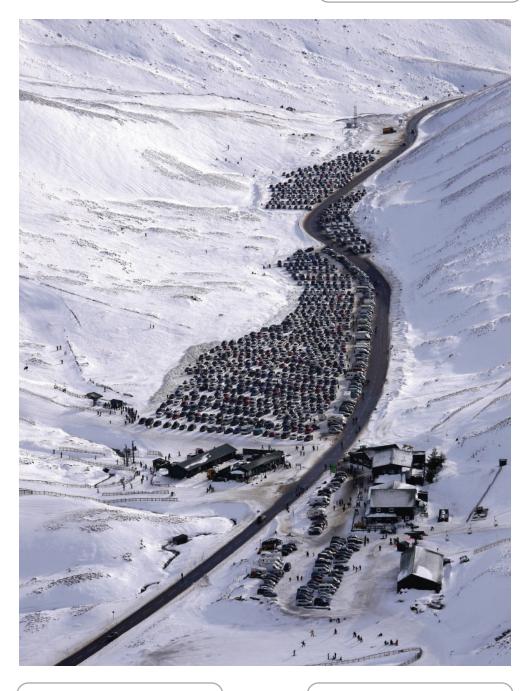
A glaciated upland landscape in the Lake District, England



Glenshee ski resort in the Cairngorms, Scotland

The ski area covers 8.1 km².

There are plans to build three double zip wires.



More than 1000 people can visit at busy winter weekends.

There are snowmaking cannons at the resort.

Figure 4c

A view of Glenshee ski resort in the Cairngorms, Scotland

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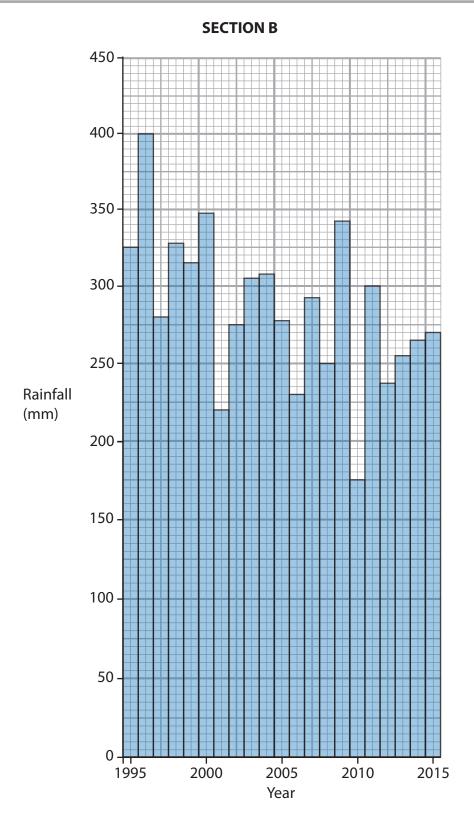
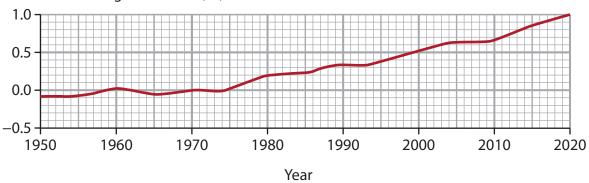


Figure 5a
Winter rainfall in South western Australia, 1995–2015



Temperature change from the 1951–1980 global mean (°C)



Key

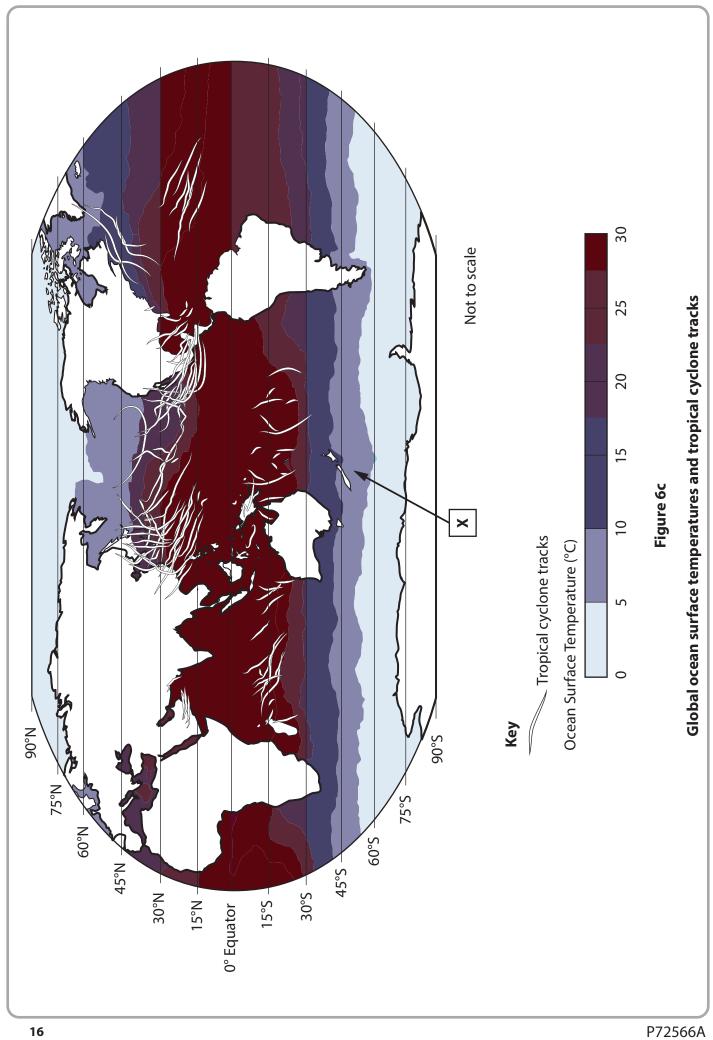
—— Change in global temperature compared to the 1951–1980 mean

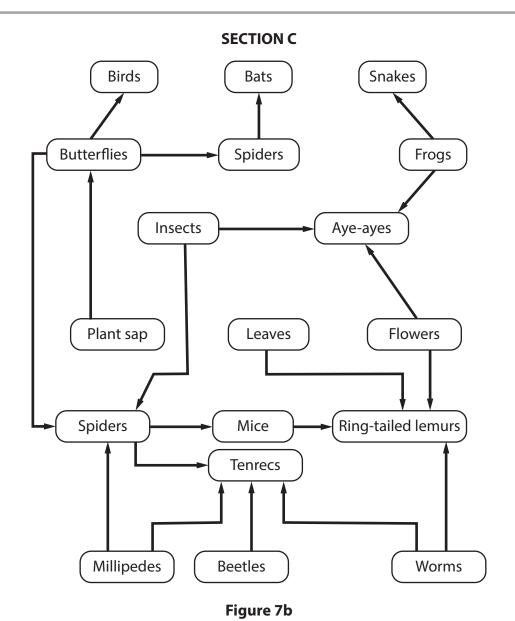
Figure 6a
Changes in global temperature

Tropical cyclone	Month	Deaths
ldai	March	1303
Kenneth	April	50
Lekima	August	91
Dorian	September	63
Nakri	November	22
Bulbul	November	38
Phanfone	December	50

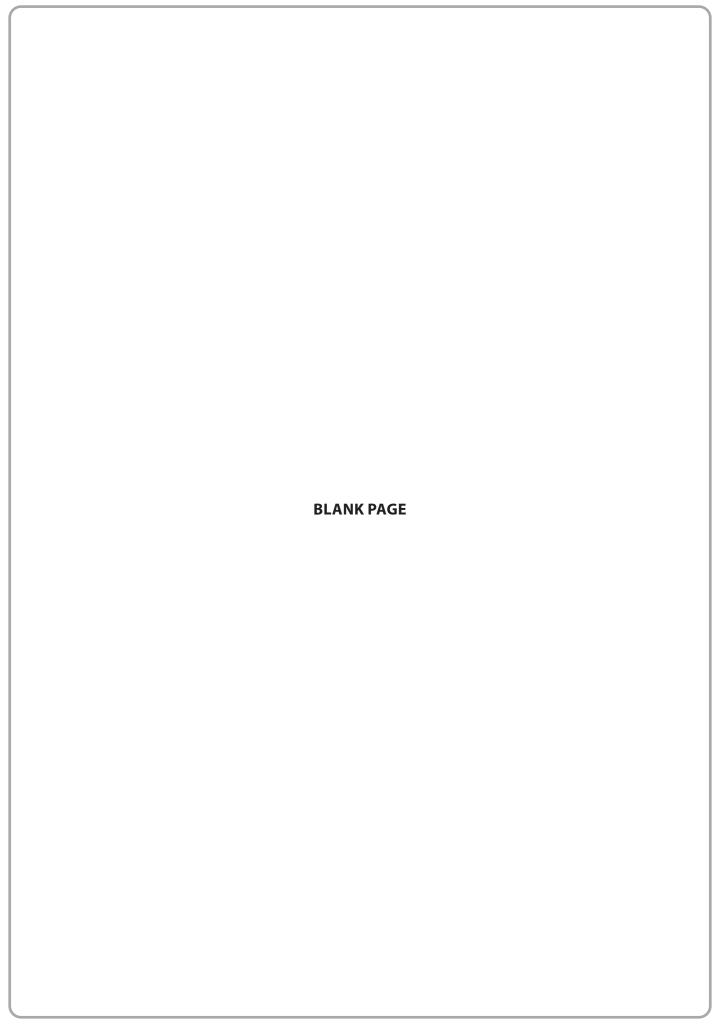
Figure 6b

Tropical cyclones with the highest number of deaths in 2019

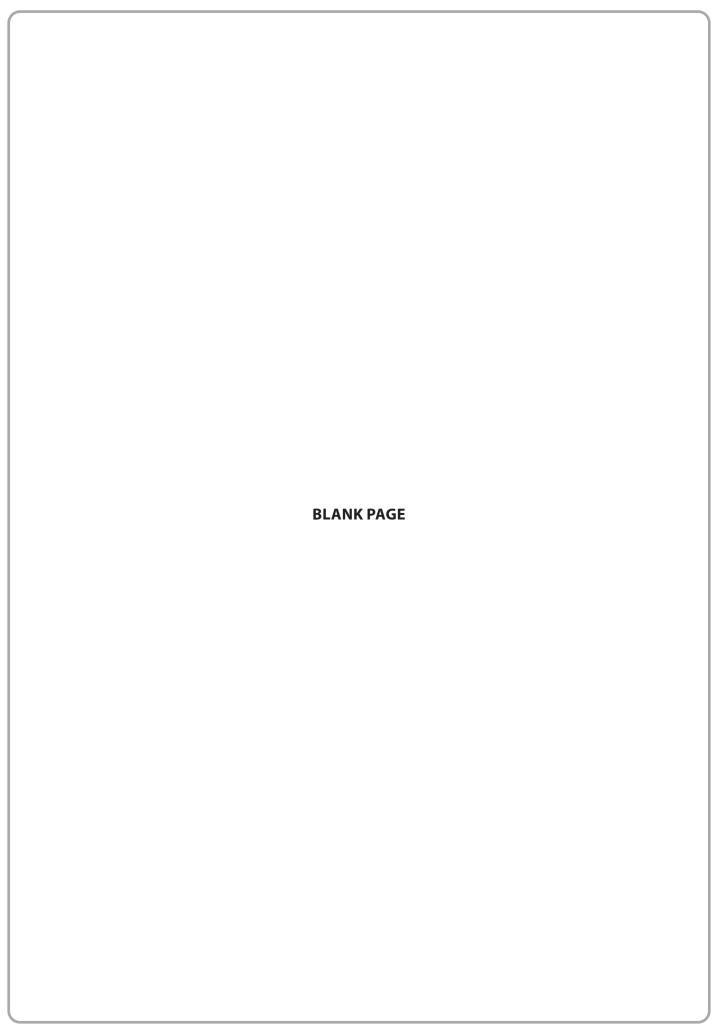




A food web for an area of tropical rainforest







BLANK PAGE Acknowledgements Pearson Education Ltd. gratefully acknowledges all the following sources used in the preparation of this paper: Figure 1 Ordnance Survey Figure 2a https://urbanrim.org.uk/coastal%20erosion.htm#data Figure 2b © Mr. Nut/Alamy Stock Photo Figure 2c Ordnance Survey Figure 3a https://curriculum-press.co.uk/ Figure 3b Ordnance Survey Figure 3c © STUART WALKER/Alamy Stock Photo Figure 4a Ordnance Survey Figure 4b Ordnance Survey Figure 4c © StockShot/Alamy Stock Photo Figure 5a Australian Bureau of Meteorology Figure 6c https://www.ncdc.noaa.gov/cdr/oceanic/sea-surface-temperature-pathfinder

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